C-4

Annual Report of Operations for Year 2020

To comply with NPDES General Permit No. WAG130000 for Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country within the Boundaries of the State of Washington

NPDES # for your Facility:	WAG 130022

Facility & Owner Information

Facility Name:	U.S. Fish and Wildlife Service, Quilcene National Fish Hatchery		
Operator Name (Permittee):	Department of the Interior		
Address:	281 Fish Hatchery Road Quilcene, WA 98376		
Email:	dan_magneson@fws.gov	Phone:	360-765-3334
Owner Name (if different from operator):	Dan Magneson		
Email:		Phone:	

Best Management Practices (BMP) Plan

Has the BMP Plan been reviewed this year? ☒ Yes ☐ No

Does the BMP Plan fulfill the requirements of the General Permit? ☒ Yes ☐ No

Summarize any changes to the BMP Plan since the last annual report. Attach additional pages if necessary.

EPA General Permit WAG130000 - Annual Report

Operations and Production

Total harvestable weight produced in the past calendar year in pounds (lbs): 32,684 Pounds of food fed to fish during the maximum month: 5016

List the species grown or held at your facility and the annual production of each in gross harvestable weight. If fish were released rather than harvested, list the weight at time of release.

Species	Fish Produced	Receiving Water(s) to which Fish were Released	Month Released/ Spawned
Coho Salmon	31,650	Big Quilcene River	April 2020

Fill in the table below with production numbers from the past year. List the **maximum** amount of fish on-site and the maximum amount of food fed **per month**.

Month	Total Fish (lbs)	Fish Feed (lbs)	Month	Total Fish (lbs)	Fish Feed (lbs)
January	22162	1936	July	8691	2332
February	25817	2332	August	14,843	5016
March	31005	3872	September	18,734	3124
April	34301	4796	October	19,782	2420
May	4048	1232	November	21,546	1540
June	6123	1584	December	22,784	1628

Additional Comments:

Solid Waste Disposal

Describe the solid waste disposed of during the calendar year (including fish mortalities).

Type of Solid Disposed	Date Disposed	Location Disposed

Additional Comments: Fish Mortalities (juvenile) to Landfill Operation via Commercial Garbage Hauler. Adult (Spawned and Holding Pond Mortality Only) buried on station property.

Fish Mortalities

Include a description and the dates of mass mortalities in the past year (more than 5% per week). Attach additional pages, if necessary. Include total mortalities from all causes.

Date	Cause of Deaths	Steps Taken to Correct Problem	Pounds of Fish

Additional Comments:

No Instances of Mass Mortality During 2020

Noncompliance Summary

Include a description and the dates of noncompliance events (including spills), the reasons for the incidents, and the steps taken to correct the problems. Attach additional pages, if necessary.
None.

Inspections & Repairs for Production & Wastewater Treatment Systems

Date Inspected	Date Repaired	Description of System Inspected and/or Repaired
May 2020	None were Needed	All Fish Production - Related Piping Fixtures and Concrete Surfaces

Aquaculture Drugs and Chemicals

Please indicate whether you used each drug/chemical **during the past calendar year.**
Describe the use of each drug/chemical in more detail on the following pages.

Used in the past year?	Drug or Chemical
☐ Yes ☒ No	Azithromycin
☐ Yes ☒ No	Chloramine-T: ***See additional reporting requirements on page 7***
☐ Yes ☒ No	Chlorine
☐ Yes ☒ No	Draxxin
☐ Yes ☒ No	Erythromycin - injectable
☐ Yes ☒ No	Erythromycin - medicated feed
☐ Yes ☒ No	Florfenicol (Aquaflor)
☒ Yes ☐ No	Formalin - 37% formaldehyde: ***See additional reporting requirements on page 7***
☐ Yes ☒ No	Herbicide - describe:
☐ Yes ☒ No	Hormone - describe:
☐ Yes ☒ No	Hydrogen Peroxide: ***See additional reporting requirements on page 7***
☒ Yes ☐ No	Iodine: ***See additional reporting requirements on page 7***
☐ Yes ☒ No	Oxytetracycline
☐ Yes ☒ No	Potassium Permanganate: ***See additional reporting requirements on page 7***
☐ Yes ☒ No	Romet
☐ Yes ☒ No	SLICE (emamectin benzoate)
☐ Yes ☒ No	Sodium Chloride - salt
☐ Yes ☒ No	Vibrio vaccine
☐ Yes ☒ No	Other:
☐ Yes ☒ No	Other:

Aquaculture Drugs and Chemicals (cont'd)

Describe all drug and/or chemical treatments that occurred during the year. Fill out the information below for each drug or chemical, plus page 7 for water-borne treatments. Attach additional pages as necessary.

Brand Name: Western Chemical		Generic Name: Parasite-S	
Reason for use:			
☒ Preventative/Prophylactic ☐ As-needed	Total quantity of formulated product per treatment (specify units): 4.0 gallons	Total quantity of formulated product used in past year (specify units): 275 gallons	
Date(s) of treatment: August 21, 2020 – December 14, 2020			Total number of treatments in past year: 50
Maximum daily volume of treated water:	Treatment concentration (specify units):	Duration and frequency of treatment(s): M-W-F 4.0 gallons dispensed over 20 minutes for adults, this is maximum level. Eggs also M-W-F, amounts variable.	
Method of application:	☐ Static Bath ☒ Flow-through	☐ Medicated Feed ☒ Other (describe): pump (for eggs) dispensed via + adults, too	
Location in facility chemical was used (check all that apply):	☒ Raceways ☒ Incubation building	☐ Ponds ☐ Off-line settling basin	☐ Other (describe):
Where did water treated with this chemical go? (check all that apply):	☐ Discharged w/o treatment ☒ Settling basin	☐ Septic System ☐ Publicly owned treatment works	☐ Other (describe):
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use: Metered out by pump, for both. All is routed to EPA Settling Pond.			

Brand Name: Hach		Generic Name: 25569-00 Free Chlorine Reagent Set	
Reason for use: Measure/Monitor Free Chlorine Levels (Drinking Water)			
☒ Preventative/Prophylactic ☐ As-needed	Total quantity of formulated product per treatment: each set = 946 mLs.	Total quantity of formulated product used in past year (specify units): 10 sets of Reagents = 9,460 mLs.	
Date(s) of treatment: January 1, 2020 – December 31, 2020			Total number of treatments in past year: All 365 days of the year
Maximum daily volume of treated water: per 24 hours 1,938,240 gallons (diluting 3 Lts. Pre-Settling Basin Spill-Over flows.)	Treatment concentration (specify units):	Duration and frequency of treatment(s):	
Method of application:	☐ Static Bath ☒ Flow-through	☐ Medicated Feed ☐ Other (describe):	
Location in facility chemical was used (check all that apply):	☐ Raceways ☐ Incubation building	☐ Ponds ☐ Off-line settling basin	☒ Other (describe): Isolation Building not used since 2014, so Domestic Water only.
Where did water treated with this chemical go? (check all that apply):	☒ Discharged w/o treatment ☐ Settling basin	☐ Septic System ☐ Publicly owned treatment works	☐ Other (describe):
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use:			